
U.S. Department of the Interior • U.S. Geological Survey

MINERAL INDUSTRY SURVEYS

Mark Schaefer, Interim Director

Reston, VA 20192

For information, contact:

John W. Blossom, Commodity Specialist

Telephone: (703) 648-4964, Fax: (703) 648-7757

E-mail: jblossom@usgs.gov

Lisa Harley, Statistical Assistant

Barbara McNair, Statistical Assistant

MINES FaxBack: (703) 648-4999

Internet: <http://minerals.er.usgs.gov/minerals>

MOLYBDENUM IN OCTOBER 1997

Domestic production of molybdenum in concentrate decreased 1% in October 1997 compared with that of the previous month and was 9% less than in October 1996, according to the U.S. Geological Survey. Producer molybdenum stocks in concentrate, oxide, and other product forms were 8,250 metric tons at the beginning of 1997 and 10,300 metric tons at the end of October 1997.

Included in this Mineral Industry Surveys are U.S. production, shipments, and stocks of molybdenum concentrates and materials, plus U.S. consumption by end use of molybdenum in the previous and current months. Also included are trade data for the previous 2 months. During the current month, Platt's

Metals Week U.S. monthly average price for molybdenum concentrate was \$4.960 per kilogram (\$2.250 per pound). The average price for dealer molybdenum oxide was \$8.631 per kilogram (\$3.915 per pound) and that for dealer ferromolybdenum was \$11.479 per kilogram (\$5.207 per pound).

For the week ending December 12, 1997, Metals Week U.S. average price for molybdenum concentrate was \$4.960 per kilogram (\$2.250 per pound). The average price for dealer molybdenum oxide was \$8.179 per kilogram (\$3.710 per pound) and that for ferromolybdenum was \$11.023 per kilogram (\$5.000 per pound).

TABLE 1
U.S. SALIENT MOLYBDENUM CONCENTRATE STATISTICS 1/

(Metric tons, contained molybdenum)

	1996	1997		
		September	October	Year to date
Production	56,000	5,220	5,150	51,100
Shipments: 2/				
Domestic	16,100	940	1,090	10,400
Export	19,700	1,840	1,580	17,100

1/ Data are rounded to three significant digits.

2/ Includes molybdic oxides, metal powder, ammonium molybdate, sodium molybdate, and other.

TABLE 2
U.S. REPORTED PRODUCTION AND SHIPMENTS OF MOLYBDENUM PRODUCTS 1/

(Metric tons, contained molybdenum)

	1996	1997		
		September	October	Year to date
Gross production	46,300	4,500	4,390	40,200
Internal consumption 2/	23,900	1,920	1,860	19,100
Gross shipments	24,100	2,390	2,260	22,300

1/ Data are rounded to three significant digits.

2/ Includes molybdic oxides, metal powder, ammonium molybdate, sodium molybdate, and other.

TABLE 3
U.S. REPORTED CONSUMPTION, BY END USES, AND CONSUMER STOCKS OF MOLYBDENUM MATERIALS 1/ IN 1997

(Kilograms, contained molybdenum)

End use	Molybdic oxides	Ferro molybdenum 2/	Ammonium and sodium molybdate	Molybdenum scrap	Other	Total
September:						
Steel:						
Carbon	46,400	W	--	--	3,190	49,600
High-strength low-alloy	53,500	9,450	--	--	--	62,900
Stainless and heat-resisting	213,000 r/	22,500 r/	--	--	4,700	240,000 r/
Full alloy	224,000 r/	185,000 r/	--	--	2,330	412,000 r/
Tool	107,000	7,830	--	--	2,310	117,000
Total	644,000 r/	225,000 r/	--	--	12,500	882,000 r/
Cast irons (gray, malleable, and ductile iron)	1,670	57,500	--	--	763	60,000
Superalloys	73,100 r/	W	--	21,700 r/	38,800	134,000 r/
Alloys: (other than steels, cast irons, and superalloys)						
Welding materials (structural and hard-facing)	--	W	--	534	285	819 r/
Other alloys 3/	--	W	--	(4/)	6,150	6,150 r/
Mill products made from metal powder 5/	--	--	--	--	320,000 r/	320,000 r/
Cemented carbides and related products 6/	--	--	--	--	14	14
Chemical and ceramic uses:						
Pigments	--	--	1,280	--	--	1,280
Catalysts	77,300	--	W	--	14,900	92,200
Other 7/	(8/)	--	--	--	2,660	2,660
Miscellaneous and unspecified uses:						
Lubricants	--	--	--	--	9,730	9,730
Other	--	31,300 r/	75,600	--	--	107,000 r/
Grand total	796,000 r/	314,000 r/	76,900	22,300 r/	405,000 r/	1,610,000 r/
Stocks, September 30, 1997	571,000 r/	320,000	10,400	54,000 r/	811,000	1,770,000 r/

See footnotes at end of table.

TABLE 3--Continued
U.S. REPORTED CONSUMPTION, BY END USES, AND CONSUMER STOCKS OF MOLYBDENUM MATERIALS 1/ IN 1997

(Kilograms, contained molybdenum)

End use	Molybdc oxides	Ferro molyb- denum 2/	Ammonium and sodium molybdate	Molyb- denum scrap	Other	Total
October:						
Steel:						
Carbon	57,200	W	--	--	3,190	60,300
High-strength low-alloy	52,700	9,580	--	--	--	62,300
Stainless and heat-resisting	219,000	24,800	--	--	4,700	249,000
Full alloy	240,000	174,000	--	--	2,330	417,000
Tool	91,500	7,680	--	--	2,310	101,000
Total	661,000	216,000	--	--	12,500	890,000
Cast irons (gray, malleable, and ductile iron)	1,670	114,000	--	--	763	116,000
Superalloys	73,100	W	--	21,800	45,500	140,000
Alloys: (other than steels, cast irons, and superalloys)						
Welding materials (structural and hard-facing)	--	--	--	534	285	819
Other alloys 3/	--	W	--	--	6,150	6,150
Mill products made from metal powder 5/	--	--	--	--	317,000	317,000
Cemented carbides and related products 6/	--	--	--	--	9	9
Chemical and ceramic uses:						
Pigments	--	--	1,280	--	--	1,280
Catalysts	77,300	--	W	--	14,900	92,200
Other 7/	(8/)	--	--	--	2,660	2,660
Miscellaneous and unspecified uses:						
Lubricants	--	--	--	--	12,700	12,700
Other	--	32,200	75,600	--	--	108,000
Grand total	813,000	363,000	76,900	22,300	412,000	1,690,000
Stocks, October 31, 1997	587,000	433,000	10,400	54,000	807,000	1,890,000

r/ Revised. W Withheld to avoid disclosing company proprietary data; included in "Other" of the "Miscellaneous and unspecified uses" category.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Includes calcium molybdate.

3/ Includes magnetic and nonferrous alloys.

4/ Revised to zero.

5/ Includes ingot, wire, rod, and sheet.

6/ Includes construction, mining, oil and gas, metal working machinery.

7/ Includes ground coat, glass, silicone, electroplating, and drier in paint or related uses.

8/ Withheld to avoid disclosing company proprietary data.

TABLE 4
U. S. EXPORTS OF MOLYBDENUM ORES AND CONCENTRATES
(Including roasted concentrate), BY COUNTRY 1/

(Kilograms, contained molybdenum)

Country	1996	1997		
		August	September	Year to date
Australia	30,900	9,800	9,800	71,900
Belgium	12,400,000	491,000	496,000	10,900,000
Brazil	20,400	--	--	32,400
Canada	268,000	37,600	64,600	380,000
Chile	6,990,000	594,000	368,000	4,550,000
China	1,290,000	30,900	--	313,000
France	5,620	--	--	143
Germany	505,000	134,000	18,100	496,000
India	58,600	--	--	--
Italy	384,000	19,000	19,000	213,000
Japan	5,140,000	445,000	218,000	4,400,000
Korea, Republic of	10,200	272	--	272
Mexico	5,500,000	534,000	727,000	4,120,000
Netherlands	5,890,000	166,000	1,460,000	12,300,000
Spain	19,900	18,400	18,400	102,000
Sweden	473,000	39,800	102,000	708,000
United Kingdom	6,010,000	215,000	485,000	3,900,000
Other	--	331	--	9,870
Total	45,000,000	2,730,000	3,980,000	42,500,000

1/ Data are rounded to three significant digits; may not add to totals shown.

Source: Bureau of the Census.

TABLE 5
U. S. EXPORTS OF FERROMOLYBDENUM, BY COUNTRY 1/

(Kilograms, contained molybdenum)

Country	1996	1997		
		August	September	Year to date
Australia	--	--	--	546
Canada	252,000	69,500	23,500	347,000
China	--	--	2,950	3,080
Italy	--	--	--	3,170
Japan	117,000	5,350	5,340	41,700
Korea, Republic of	1,910	--	--	1,970
Malaysia	37,200	--	--	--
Mexico	117,000	8,580	5,420	93,700
Singapore	53,900	--	--	--
Spain	1,160	--	--	--
Taiwan	--	3,030	--	10,600
Venezuela	1,090	--	--	--
Other	--	--	--	--
Total	581,000	86,400	37,200	502,000

1/ Data are rounded to three significant digits; may not add to totals shown.

Source: Bureau of the Census.

TABLE 6
U.S. IMPORTS FOR CONSUMPTION OF MOLYBDENUM PRODUCTS 1/

(Kilograms unless otherwise specified)

Material	1996			1997		
	January-December			January-September		
	Gross weight	Contained molybdenum	Value (c.i.f.) (thousands)	Gross weight	Contained molybdenum	Value (c.i.f.) (thousands)
Ore and concentrates roasted	8,090,000	3,460,000	\$41,300	5,960,000	3,700,000	\$36,600
Ore and concentrates other	35,600	21,100	173	1,740,000	918,000	6,660
Molybdenum chemicals:						
Oxides and hydroxides	1,160,000	NA	8,850	1,180,000	NA	9,580
Molybdates of ammonium	665,000	368,000	5,360	628,000	342,000	5,040
Molybdates (all others)	82,500	36,400	506	157,000	103,000	933
Molybdenum orange	1,840,000	NA	5,710	1,260,000	NA	4,530
Mixtures of inorganic compounds	--	--	--	--	--	--
Ferromolybdenum	7,870,000	4,960,000	55,100	3,760,000	2,350,000	24,500
Molybdenum powders	125,000	110,000	3,470	64,600	57,200	2,230
Molybdenum unwrought	91,100	84,400	2,380	271,000	253,000	3,770
Molybdenum waste and scrap	693,000	640,000	9,720	438,000	430,000	7,070
Molybdenum wrought	--	--	--	--	--	--
Molybdenum wire	1,990	NA	320	2,570	NA	328
Molybdenum other	3,870	NA	1,060	4,730	NA	867
Total	20,700,000	11,700,000	134,000	15,500,000	8,150,000	102,000

NA Not available.

1/ Data are rounded to three significant digits; may not add to totals shown.

Source: Bureau of the Census.